Who Are People with Disabilities?



Gloria L. Krahn, PhD, MPH

Director, Division of Human Development and Disability

National Center on Birth Development and Developmental Disabilities

CDC



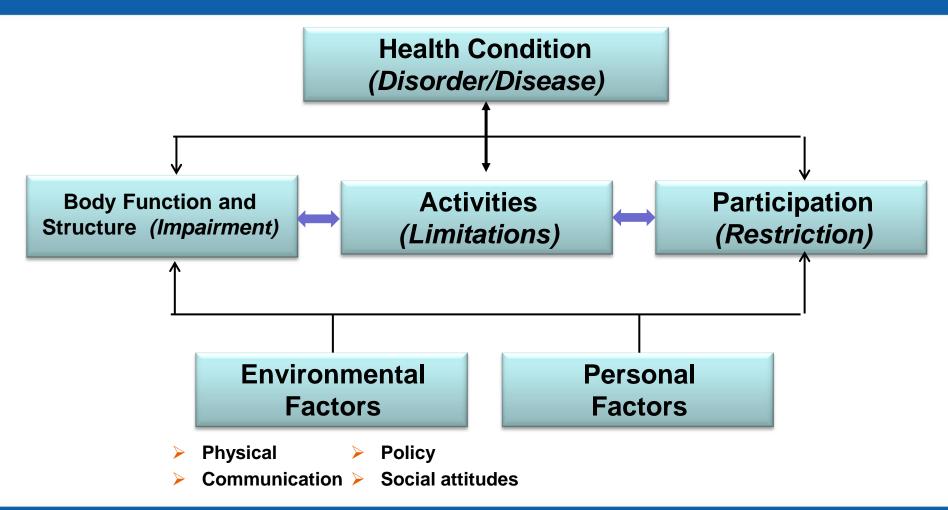
Who Are People with Disabilities?



What Is Disability?

- Impairment in body function or structure
 - E.g., retinal detachment, missing limb
- Limitation in activity
 - E.g., difficulty seeing, hearing, walking, or problem-solving
- Restriction in participation in daily and societal activities
 - E.g., cooking a meal, driving an automobile

International Classification of Functioning, Disability, and Health



Disability and Society

- Disability is not viewed as the health condition of a person
- □ It is the limitation experienced in the context of the community and society in which the individual lives

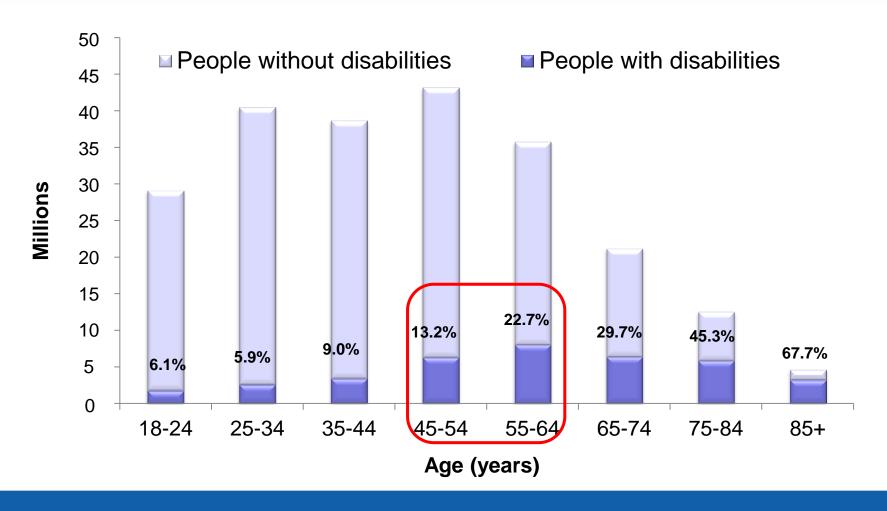
Societal and environmental accommodations are critical for people with disabilities to engage in various daily activities

Disability in the United States

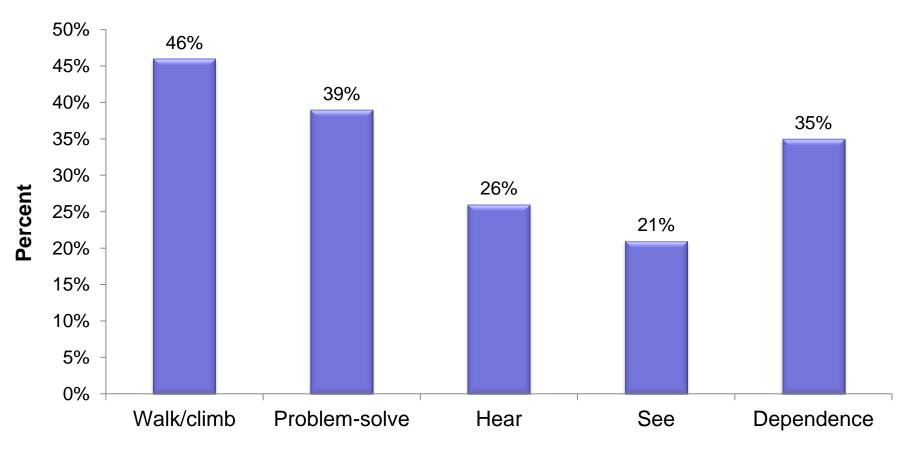
- □ 1 in 6 people (37.5 M adults or 16% U.S. population) report serious limitations in functioning
- Health cares costs associated with disability are estimated at about \$400 billion/year
 - > > 1/4 quarter of all health expenditures
 - Medicaid and Medicare programs incur about 70% of these costs

Adults with and without Disabilities by Age Group United States, 2010

(Weighted Population Estimates)



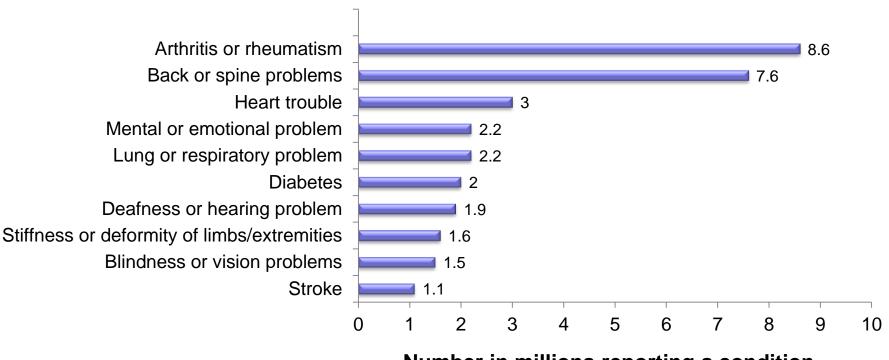
Prevalence of Disability Types among Adults with Co-occurring Disabilities



Co-occurring disabilities: Total >100%

Arthritis is the Most Common Cause of Disability in the United States

Most Common Causes of Disability in the United States



Number in millions reporting a condition

Health Disparities in People with Disabilities

- People with disabilities continue to experience significant disparities in their health and health care
 - 4 times more likely to report their health to be fair/poor
 - > 2.5 times more likely to report unmet health care needs
 - A narrower margin of health because of
 - Poverty and other social determinants
 - Secondary health conditions such as pressure sores or urinary tract infections
 - Difficulty accessing mainstream health and public health programs

The Role of Public Health to Improve Health of People with Disabilities

- Prevent disabilities when possible
- Improve data on people with disabilities
- Improve health of people with disabilities
- Reduce health disparities among people with disabilities

CDC Strategy: Make the Broadest Impact

- Include people with disabilities in mainstream programs and services wherever possible
- Use cross-disability approaches where necessary to address unique health needs of people with disabilities
- Use condition-specific focus where essential

CDC Strategy: Specific Actions

- Promote inclusion of people with disabilities in CDC surveys, programs, policies and communications
 - People with disabilities included in CDC surveys and reports
 - Standard disability identifiers in all HHS surveys
 - Enhanced accessibility of ~90 interventions in the Community Guide
- Fund a network of 18 state Disability and Health Programs
 - Health care access
 - Health promotion
 - Emergency preparedness
- Fund a network of Public Health Practice and Resource Centers to reach key populations



Disparities in Health among People with Disabilities in Massachusetts



Monika Mitra, PhD

Assistant Professor of Family Medicine and Community Health
Disability, Health and Employment Policy Unit
Center for Health Policy and Research
University of Massachusetts Medical School



Background

- 1990: The Americans with Disabilities Act was passed
 - 1st comprehensive civil rights law addressing the needs of people with disabilities
- Both Healthy People 2010 and Healthy People 2020 have focused on the health and well-being of people with disabilities
- However, people with disabilities continue to experience significant disparities in their health and health care

National and State-level Data about People with Disabilities

■ Behavioral Risk Factor Surveillance System (BRFSS)

- Random-digit-dialed telephone health survey of adults in the US
- Conducted in all 50 states in collaboration with the CDC
- Primary source of state-based information on risk behaviors and health status of adults
- Includes questions identifying disability in all 50 states

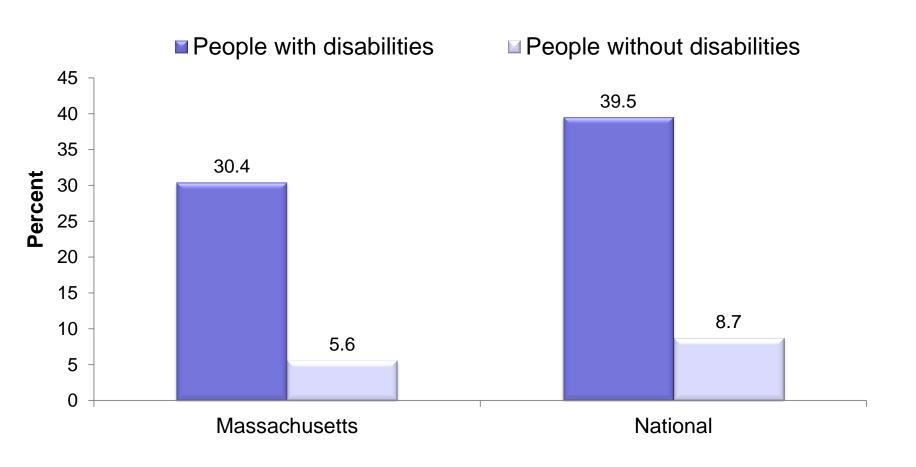
□ Pregnancy Risk Assessment Monitoring System (PRAMS)

- CDC-funded survey on maternal attitudes and experiences before, during, and shortly after pregnancy
- Survey participants sampled from eligible birth certificates including all live births to state residents
- Only 2 states include disability identifiers (MA and RI)

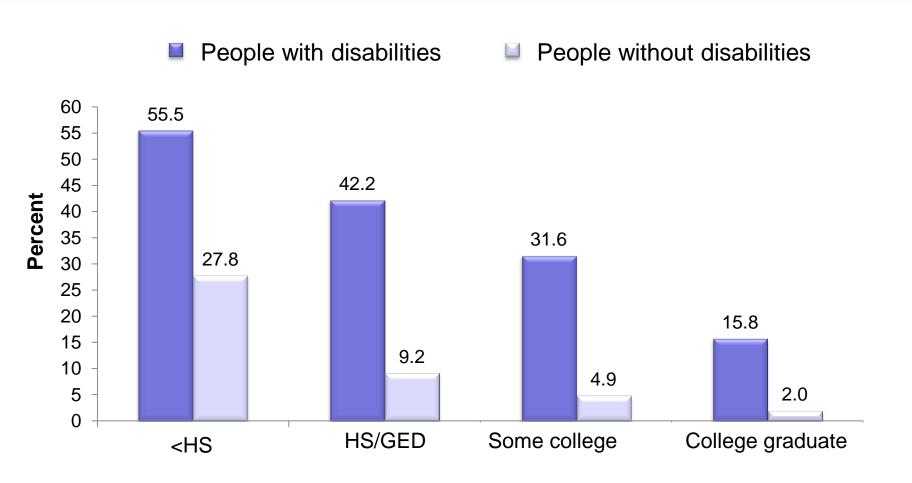
Outline

- Health status
- People with disabilities more likely to report poor general and poor mental health
- These disparities remain after stratifying by education
- Risk factors and preventive behaviors
- Health care access

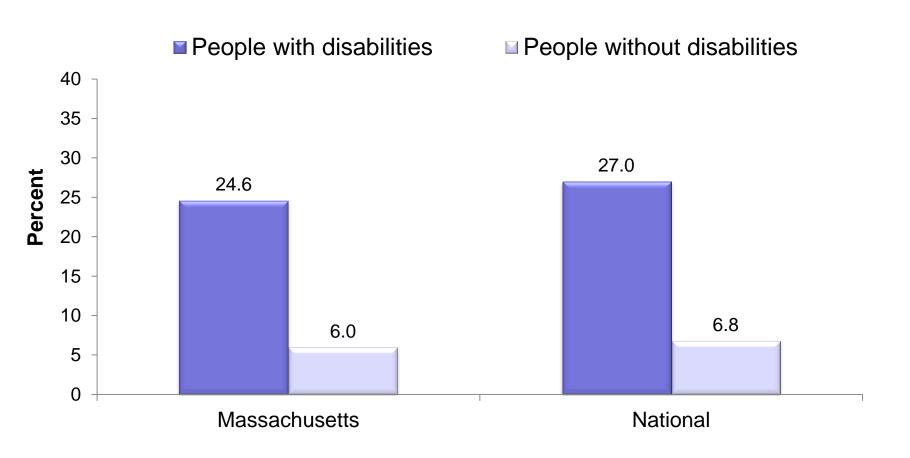
Self-Reported Fair to Poor Health by Disability Status, MA and United States, 2010



Self-Reported Fair to Poor Health by Disability Status and Education, MA, 2010



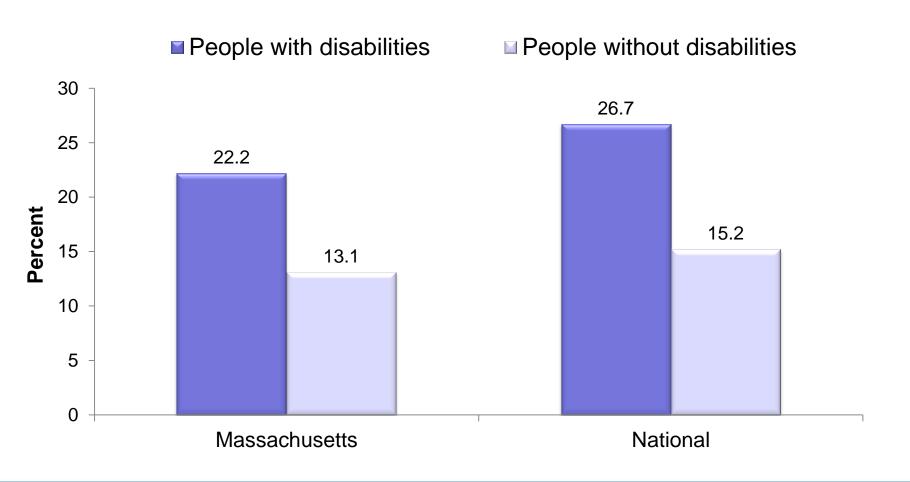
≥14 Days of Poor Mental Health in Past Month by Disability Status, MA and United States, 2010



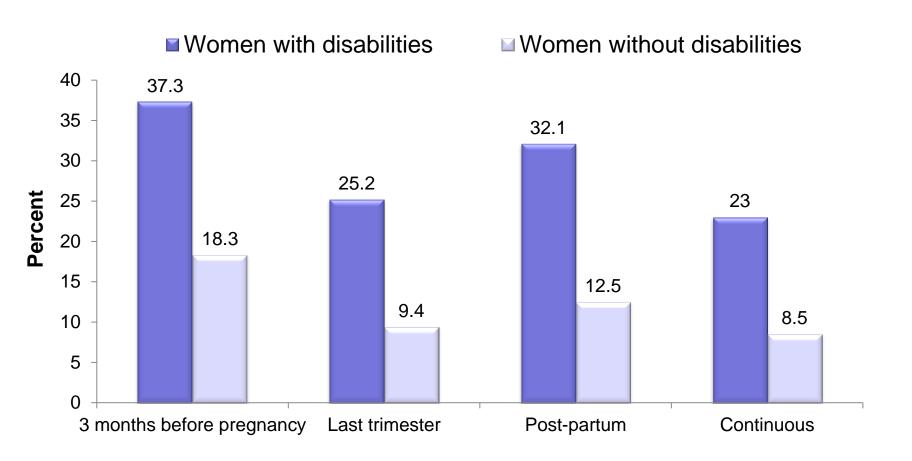
Outline

- Health status
- □ Risk factors and preventive behaviors
 - There are significant differences in risk factors and preventive behaviors by disability status
 - Differences include
 - Smoking
 - Obesity and physical inactivity
 - Injury by sexual and physical violence
- Healthcare access

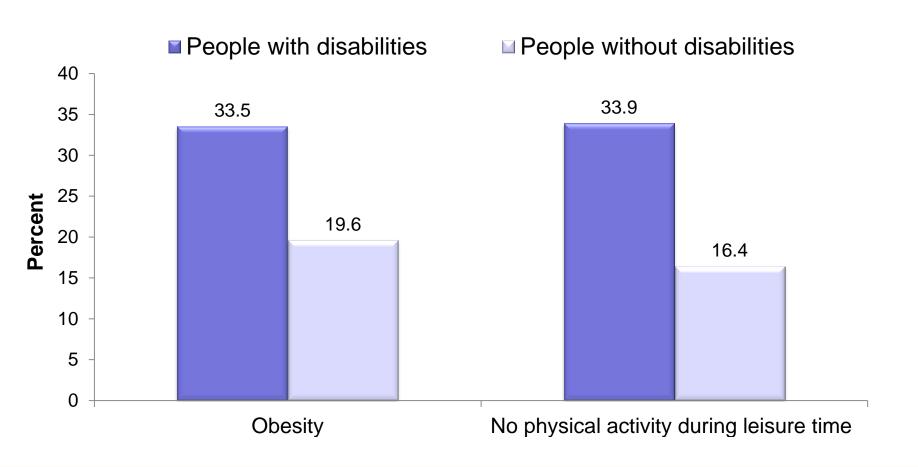
Current Smoking by Disability Status, MA and United States, 2010



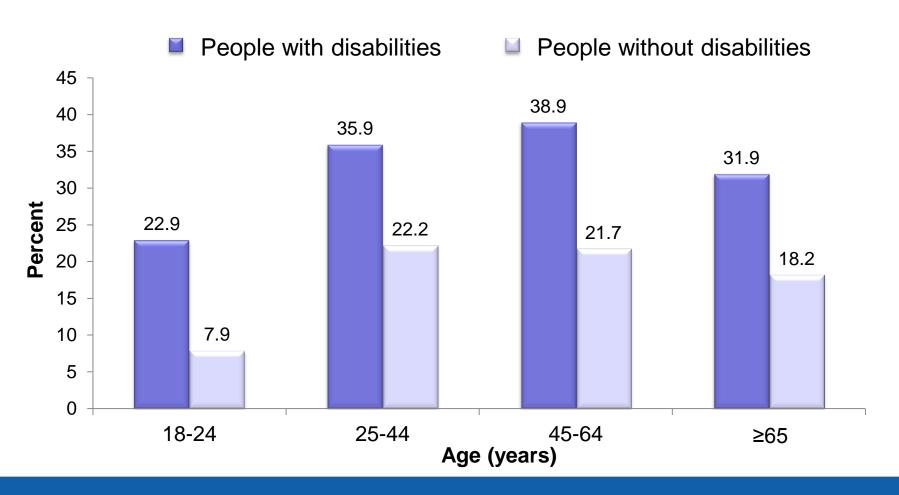
Cigarette Smoking Before, During, and After Pregnancy among Women with Live Births MA, 2007–2009



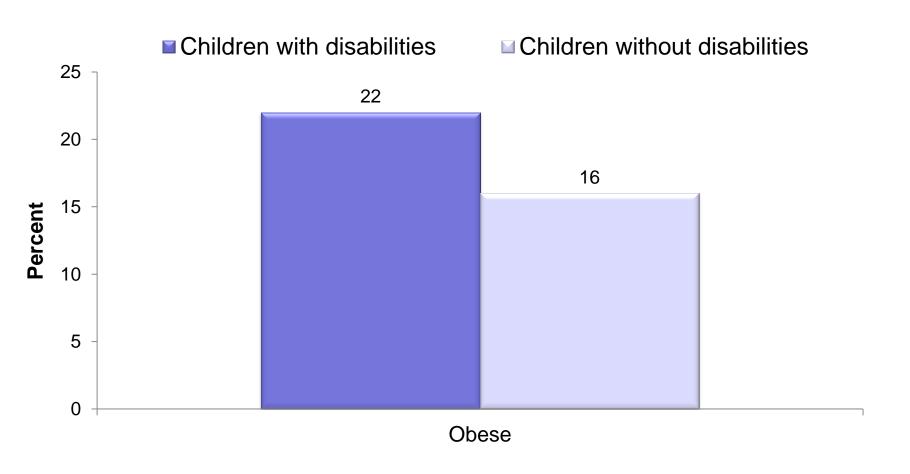
Prevalence of Obesity and Physical Inactivity by Disability Status, MA, 2010



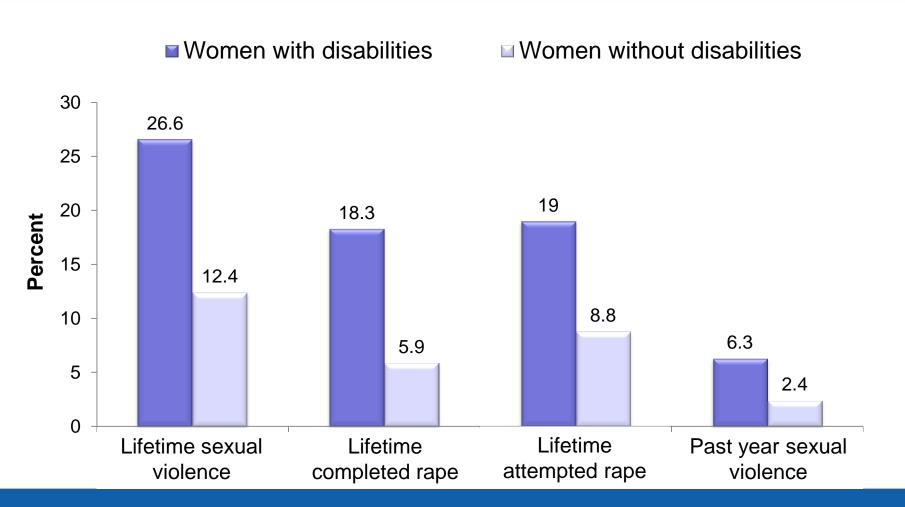
Obesity by Disability Status and Age MA, 2010



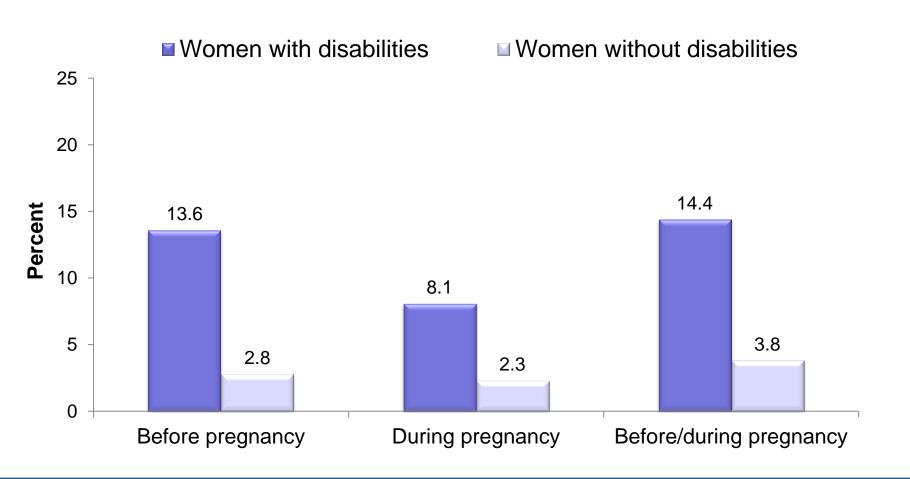
Obesity among Children 2–17 Years, by Disability Status, United States



Sexual Violence Victimization against Women by Disability Status, MA, 2005–09



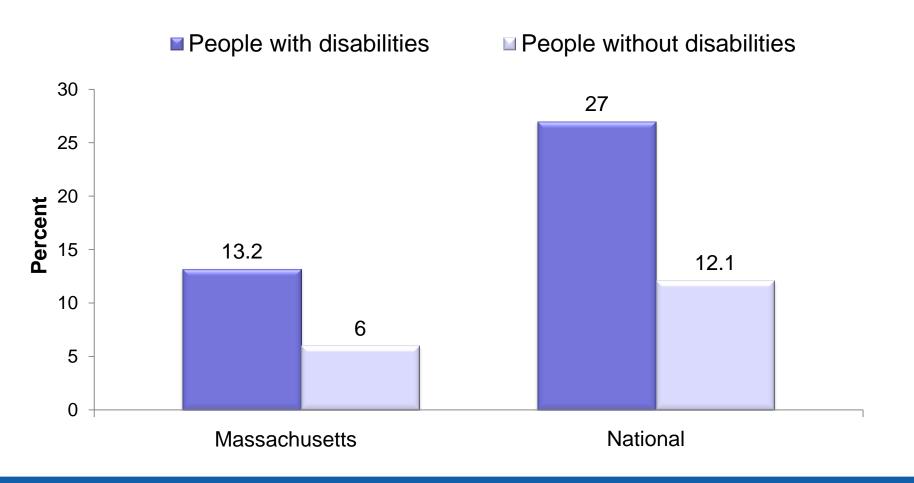
Physical Abuse Around the Time of Pregnancy Among Women with Live Births, MA, 2007–08



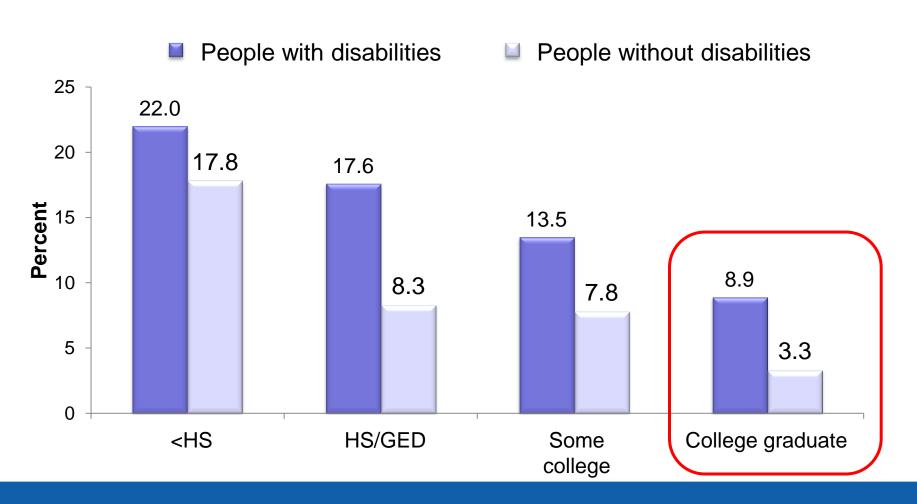
Outline

- ☐ Health status
- Risk factors and preventive behaviors
- ☐ Health care access
 - People with disabilities
 - Experience lower rates of preventive screenings
 - Have more difficulty accessing health care services

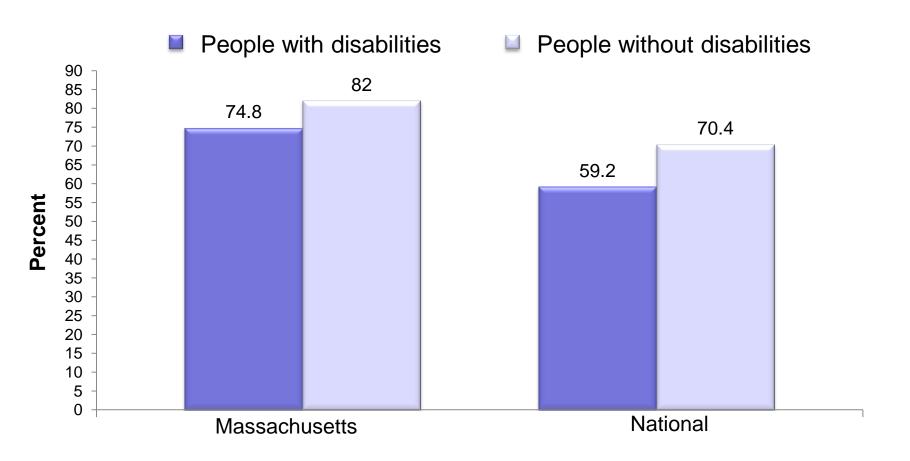
Cost as a Barrier to Seeking Health Care by Disability Status, MA and United States, 2010



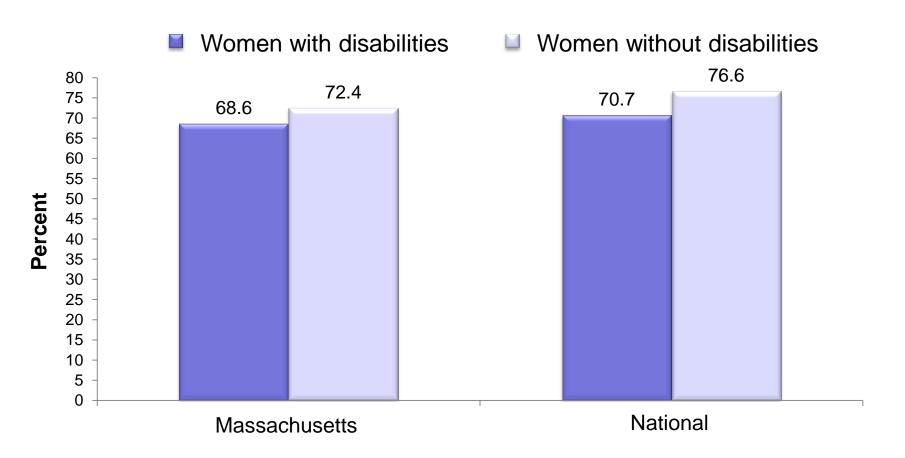
Cost as a Barrier to Seeking Health Care by Disability Status and Education, MA, 2010



Dental Visit within Past Year by Disability Status, MA and United States, 2010



Mammogram in Past Year among Women Aged ≥40 Years by Disability Status MA and United States, 2010



Summary

- There are significant disparities in health and health care access among people with disabilities in the United States and MA
- ☐ Elimination of health disparities among people with disabilities should be a critical public health priority
- Structural and environmental barriers to health care services and programs need to be addressed through a multi-stakeholder approach involving
 - The federal government
 - State and local health care professionals
 - People with disabilities and their families

Strategies to Eliminate Health Disparities

- Improve disability data collection through the inclusion of standardized disability identifiers
- Advance health and disability research
- □ Train health care and public health professionals about the needs of people with disabilities
- □ Create barrier-free environments
- People with disabilities: "Nothing about us without us"
 - Educate and empower people about their health care rights
 - Improve access to health care services and support
 - Include development and implementation of public health programs and interventions

Expanding Reach of Evidenced-based Health Promotion Programs



Jennifer M. Hootman PhD, ATC, FACSM, FNATA

Epidemiologist, Arthritis Program

Division of Population Health

National Center for Chronic Disease Prevention and Health Promotion

CDC



Arthritis in the United States Is Very Common

□ Presently: 50 million adults and 300,000 children

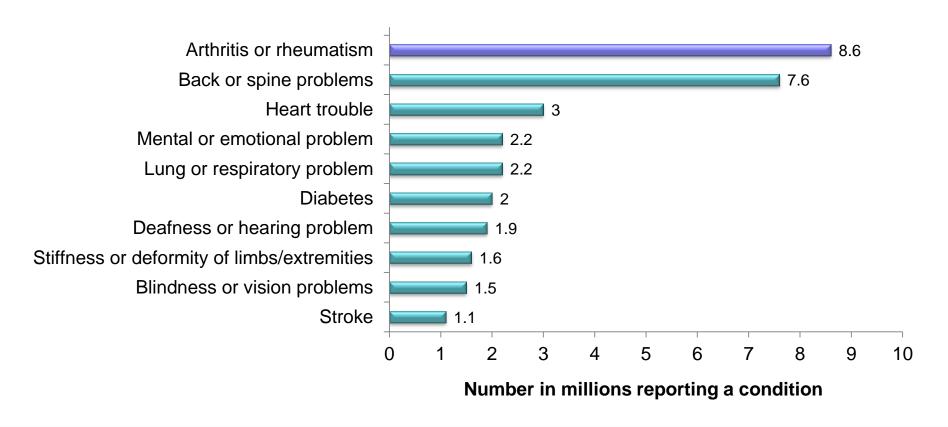
- 40% (20 million) are limited in usual, daily activities
- 33% report severe pain
- 11% are restricted in valued social activities
- These factors lead to poor quality of life

■ By 2030: 67 million adults will have arthritis

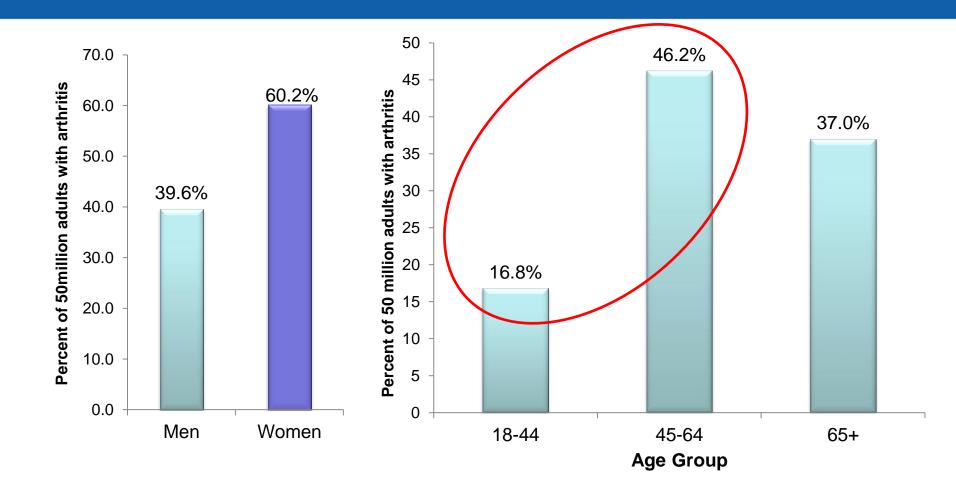
- > 37% (25 million) will be limited in their usual activities
- Based on aging of the population only

Arthritis is the Most Common Cause of Disability in the United States

Top 10 Causes of Disability Among US Adults



Arthritis in the United States



Preventing Arthritis-related Disability

- Secondary prevention: Preventing the progression of arthritis that results in
 - Worsening of symptoms and loss of function
- Physical activity: Key approach to prevention
 - Regular physical activity decreases age-related functional decline by 32%
 - Aerobic and resistance exercise reduced incident activity of daily living disability by 43% over 18 months

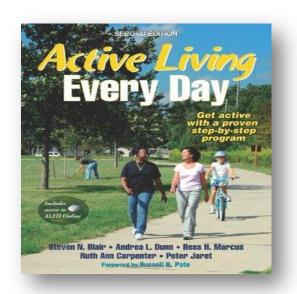
What is CDC Doing?

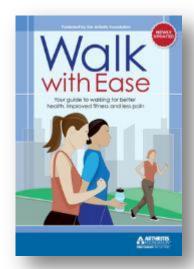
- Funding 12 states to implement arthritis management programs
 - Physical activity
 - Self-management education
 - Health communications
- Implement proven evidence-based programs to increase physical activity
 - Accommodate persons with various functional levels
 - Improve arthritis symptoms and function
 - Easily implemented in community settings

Approved Evidence-Based Physical Activity Programs

Arthritis Foundation Aquatics Program
Arthritis Foundation Exercise Program
Walk with Ease
Active Living Every Day

Enhance Fitness Fit and Strong!

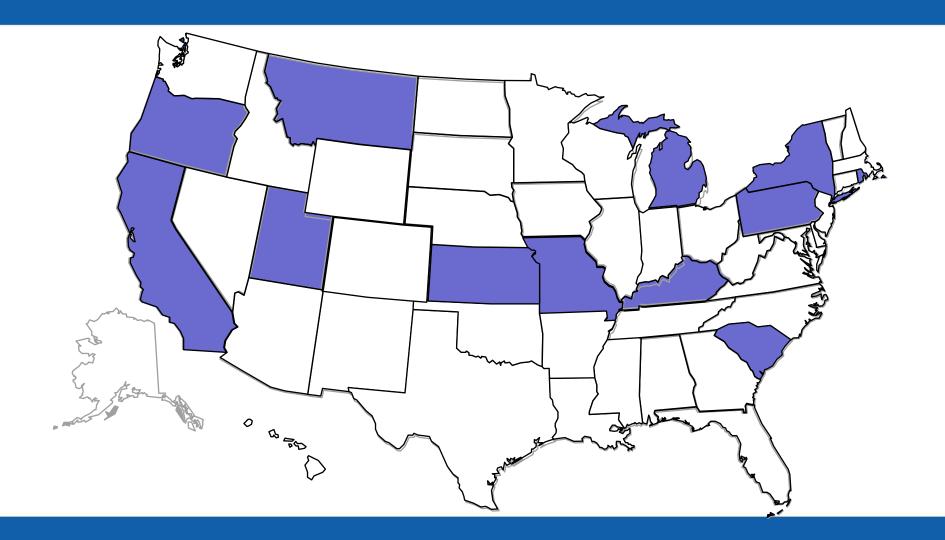




Results from the 2008–2012 Funding Cycle

- □ In the first 3 years, all 12 states increased their reach and some doubled their reach of evidence-based programs for adults with arthritis
 - > Total reach over 4 years: 132,443 people
- CDC conducted a 3-year cluster evaluation of state arthritis programs
 - Factors significantly correlated with higher reach included
 - Work with existing delivery systems that have multiple sites
 - Prioritization of the expansion of program reach

CDC-funded State Arthritis Programs 2012–2017



Average award: \$427,000/year

Required Activities for the CDC-funded State Arthritis Programs, 2012–2017

- □ Increase awareness of the importance of physical activity through health communications campaigns
- Identify and embed physical activity programs into delivery systems
 - Delivery systems: Organizations with 3 or more delivery sites
 - Embed: Offering programs is part of daily operations
- Report to CDC every 6 months
 - Reach: Number of new people with arthritis enrolling in evidence-based programs
 - Capacity: Number of systems, sites, classes, leaders, etc.

Scaling-up! 5-Year Goals for 12 States

- □ Reach 5% of the state's arthritis population (range of 12,500-50,000 per state)
- Total reach will be 457,800 new individuals with arthritis
- Decrease by 5% the proportion of adults with arthritis who report no physical activity during leisure time
 - Almost 300,00 fewer inactive adults with arthritis in these 12 states

Conclusions

- Arthritis is one of the most common chronic diseases in the United States and is the most common cause of disability
- Physical activity improves pain and function and help maintain independence
- There are evidence-based physical activity programs that can be further scaled up Success ingredients
 - Increasing awareness of the importance of physical activity through health communications campaigns
 - Embedding physical activity programs into existing delivery systems

Health and Wellness in People with Disabilities Progress in South Carolina

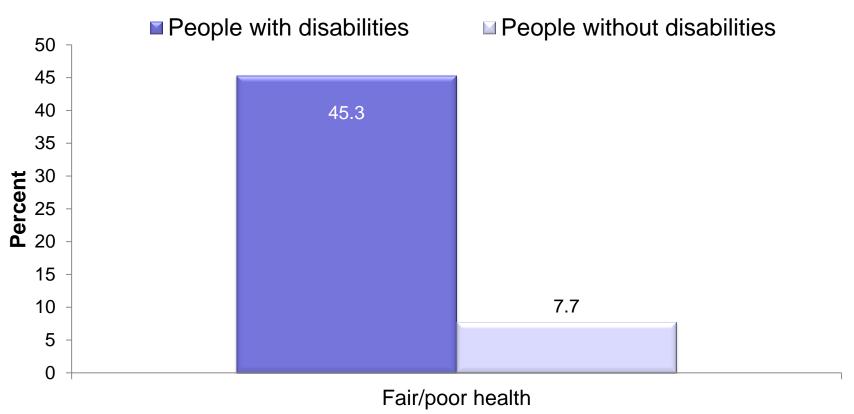


Catherine Leigh Graham, MEBME

Rehabilitation Engineer/Project Manager
University of South Carolina School of Medicine
Interagency Office of Disability and Health

Health Status of South Carolinians with Disabilities

Self-Reported Fair to Poor Health Among Adults by Disability Status



Critical Role of Partnerships in Improving the Health of People with Disabilities in SC

- Key Partnerships established in 1997
 - University of South Carolina
 - SC Health Department
 - Disability Service Agency
 - Developmental Disabilities Council
- Common Goal: Improve the health and well-being of people with disabilities in South Carolina
- SC Disability and Health Project: www.sciodh.com









Progress in SC in Three Major Areas

- Access to health care
- Health promotion



Physical Accessibility

- Issue: Physical access to primary care is critical to health of people with disabilities
- □ Goal: Assess/improve accessibility of primary care sites
- Partners
 - Health Department-Best Chance Network
 - Office of Rural Health
 - SC Blue Cross/Blue Shield





Helping women get check-ups for breast and cervical cancer

Physical Accessibility

Results

- Assessed 150 primary care sites with patient load of >750,000
- Changes made at 1/3 of practices
- Expanded to internal medicine, OB/BGN, pediatric, and dental care sites in 2012





BEFORE: No accessible parking

AFTER: Accessible parking with signage and easy slope to the ramp

- Issue: People with disabilities are not able to get on/off high exam tables and therefore do not receive proper physical exams
- Goal: Assess/increase number of providers with height-adjustable exam tables
- Partners
 - Health Department-Best Chance Network
 - Office of Rural Health
 - SC Blue Cross/Blue Shield





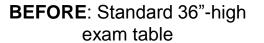
Helping women get check-ups

for breast and cervical cancer

Results

- > 34% of practices assessed had height-adjustable exam tables
- Subsequent to the assessment, 2 sites purchased a height -adjustable exam table
- Best Chance Network intake form now includes a disability screener question so a patient can be referred to accessible location







AFTER: Height adjustable exam table lowered to 19" high

- □ Issue: Weight can only be managed if it can be tracked. Yet, people with mobility disabilities are unable to weigh
- Goal: Assess/improve access to scales
- Partners
 - Health Department-Best Chance Network
 - Office of Rural Health
 - SC Blue Cross/Blue Shield



Helping women get check-ups



Results

- > <2% of practices have accessible scales
- 11 sites purchased new scales



BEFORE: Old style scales that most places have that are not wheelchair accessible or accessible to anyone with a mobility issue such as balance





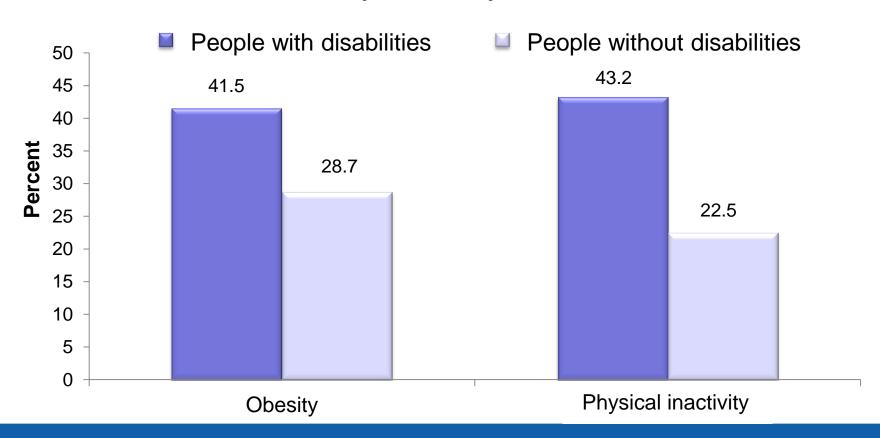
AFTER: New scales at primary care sites in SC

Progress in SC in Three Major Areas

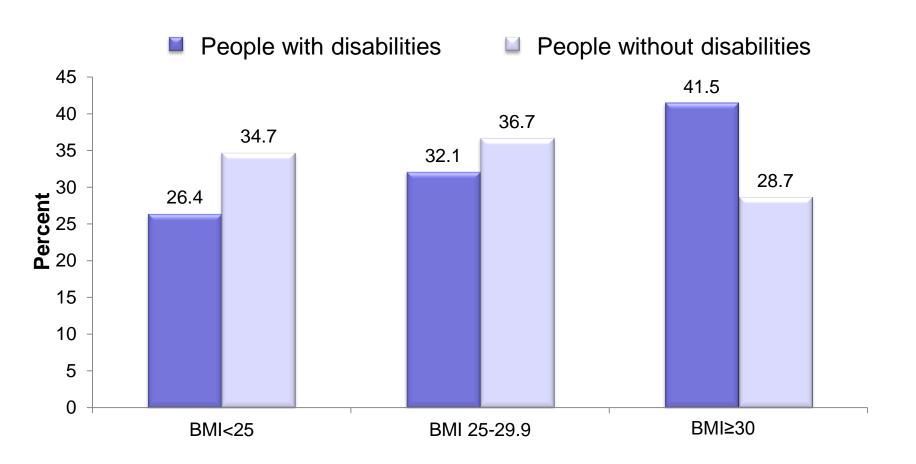


South Carolinians with Disabilities Status: Obesity and Physical Inactivity

Prevalence of Obesity and Physical Inactivity Among Adults by Disability Status



Self-Reported Body Mass Index (BMI) Among Adults by Disability Status, SC, 2010



Obesity Prevention

Health promotion program for people with disabilities

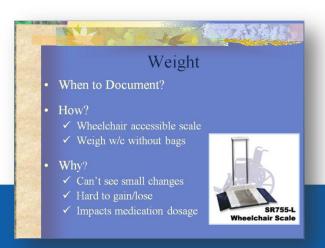
- Steps to Your Health
 - 8-week participatory program covering healthy eating and physical activity
 - >1,300 participants
 - Train-the-trainer model
- Results
 - Weight loss of ≥5 pounds during the efficacy program
 - Knowledge of healthy food choices increased

Obesity Prevention

- Health promotion program for people with and without disabilities
 - Arthritis Foundation Exercise Program
 - 8-week participatory program
 - Train the trainer model
 - Efficacy in people with disabilities

Weight Management

- Results: Instructed >700 medical students and health professionals about care for people with disabilities including weight management, proper nutrition, not smoking, physical activity
- Future Goals: Expand into other specialties and professions such as health care paraprofessionals through technical colleges



Group Risk for Developing Obesity				
Groups	Number	Prevalence	Hazard Ratio*	P-value
Autism	54	40.7	2.27	0.001
Cerebral Palsy	150	20.9	0.77	0.024
Down syndrome	47	62.1	1.63	0.001
ID & Psychiatric Illness	117	46.1	1.18	0.081
ID Alone	223	42.7	0.98	0.793
Spinal Cord Injury	38	42.1	0.88	0.687
Traumatic Brain Injury	149	45.4	1.08	0.342
Comparison	1809	46.1		
* HR= effect of an explanatory variable on the hazard (risk) of an event				

Physical Activity

- In-person training of staff of federal, state and local parks and recreation/gyms/YMCAs and the health Departments
 - Communication with people with disabilities
 - Modifications of policy, procedure, service, building and equipment to include people with disabilities

Accommodations for people with Sensory Disabilities

- · Offer assistance wait until accepted
- Identify yourself when speaking to someone who is blind.
- Never pet a guide dog.
- Speak to the person, not to a companion or interpreter.
- To get the attention of a person who is deaf, tap them on the shoulder/wave your hand.
- Written notes can facilitate communication





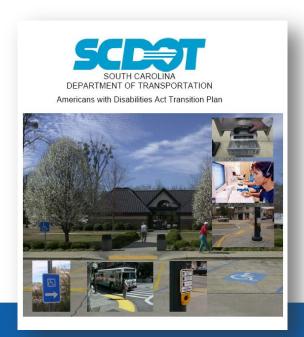
Proper communication for people who are blind or deaf

Wheelchair-accessible mat from the walkway across soft sand

Adaptation of fitness equipment for people with disabilities

Physical Activity

- Collaborated with SCDOT to update their Americans with Disabilities Act (ADA) Transition Plan for inclusive
 - Policies/drawings, communication, meetings, planning, etc.
- Results
 - DOT's new ADA transition plan calls for wheelchair accessible sidewalks, curb cuts, pedestrian crossing signals, etc.



Physical Activity

□ Trained 95% of SCDOT planners and engineers on accessibility in new construction and for modifications (lecture and hands-on experience)







Progress in SC in Three Major Areas

- Health care access
- Health promotion



Emergency Preparedness

- SC Issues/needs
 - Coastal, hurricane prone, rural state
 - High level of poverty
- Emergency Planning Committee for People with Functional Needs
 - Emergency Management Department
 - Health and Mass-Care Service Organizations
 - Disability Service/Advocacy Organizations
 - Faith-Based Organizations

Shelter Accessibility

Collaborated with Red Cross to assess shelters

- Red Cross assesses each hurricane shelter in SC
- ➤ Planning Committee assists with accessibility portion of assessment (e.g., parking, ramps, entrances, restrooms, showers, conclusion)

Measuring height of dispenser in restroom





Measuring
slope of
curb cut from
parking area to
facility entrance

Shelter Information

- Collaborated to create emergency shelter "Welcome to the Shelter" DVD
 - Looped on portable DVD at hurricane shelters
 - Can be seen at www.youtube.com/watch?v=CDnf7QdDiGw
 - Includes sign language/words and pictograms



Use of Assistive Technology in Shelters

Results

- Assistive Technology Definitions Sheet in each Shelter Kit
- Assistive Technology Kit in each Shelter Kit
 - Magnifier
 - Communication Sheet
 - Washcloths and rubber bands

Assistive Technology in Emergency Shelters

Dear Shelter Manager/Shelter Staff:

An assistive technology device is any item, piece of equipment, or product system, whether acquired commercially, modified or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.

In an emergency shelter, you may encounter a person who uses assistive technology. Below is a list and description of some common assistive technologies, including the items in your ToGo Kit.

Aids for Daily Living: Devices that help in daily living and independence.

The ToGo Kit contains a washcloth that can be wrapped around an eating utensil, toothbrush, pencil or other thin handle and secured with elastic bands to make it easier for a person with poor hand function to hold the item.

Adapted cots: Specialized raised cots allow a person who uses a wheelchair to transfer more easily.

Communication Aids: Devices that help persons with speech and/or hearing disabilities

communicate. These may include electronic communication devices, that need to be charged. There is a basic picture-alphabet board in your ToGo Kit.





Mobility Aids: Devices that help people move within their environments: power or manual wheelchairs, scooters, crutches, canes, and walkers. Power wheelchairs will need electricity for charging batteries.

Restroom Modifications: Structural adaptations that reduce physical barriers: ramps and expanded doorways. People who use wheelchairs at the shelter may need to be

housed in an area with access to an accessible restroom. An accessible restroom would have wider doorways and grab bars near the toilet.



Vision/Hearing Aids:
Aids such as magnifiers and hearing
aids. Your ToGo Kit contains a small handheld magnifier.

9/20/12

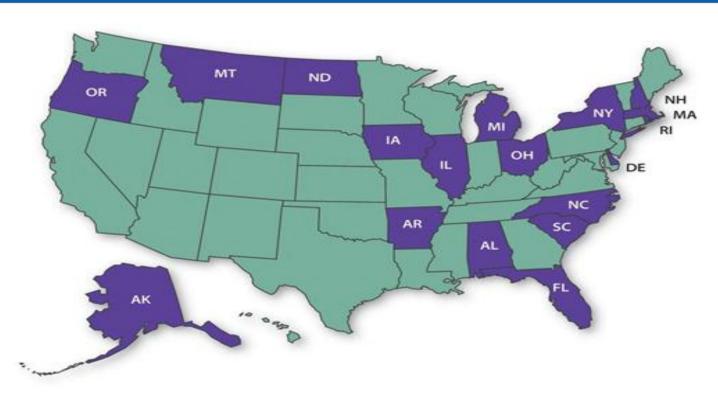
Successes

■ Adding 2 questions to the SC Behavior Risk Factor Surveillance System (BRFSS) beginning in 2013 to determine preparedness of people with disabilities

In the event of a large-scale disaster or emergency, which of the following do you have in place? Please answer yes or no to each option.

- Emergency supply kit (including items such as water, flashlight, and batteries)
- 2. Disaster evacuation plan (including how to get out of your house, or town, and where you would go)

Potential for Expanding Programs Nationally



CDC supports 18 state-based programs to promote equity in health, prevent chronic disease, and increase the quality of life for people with disabilities.

Each program customizes its activities to meet its state's needs.

Lessons Learned for Scaling Up!

Collaborators

- Requires time and sustained effort
- Identify collaborators that function at a high level
- Identify common goals

Public health's role

- Implementation of Healthy People 2020
- Integration of people with disabilities

CDC's role

- Sustained support
- Data/surveillance

Strengthening Accessibility in Public Health



Georges C. Benjamin MD, FACP, FACEP(E), FNAPA, Hon FRSPH

Executive Director, American Public Health Association





The American Public Health Association (APHA) Founded on April 18, 1872

- The oldest and largest organization of public health practioners
- Nonpartisan 501C(3)
- 50,000 individual and affiliate members
- Multiple sections, special interest, and affiliated caucuses
- Major programs
 - Professional education
 - Annual scientific meeting
 - Books
 - Briefs and distance learning
 - Health policy advocacy
 - Health communication



Three Strategic Priorities

- Build public health infrastructure and capacity
- Create health equity
- Ensure the right to health and health care



A Health Sector Leader in Disabilities for Many Years

- A model employer for many years
 - Supports an accessible workplace
 - Nondiscrimination of workers with disabilities
 - Provides universal health coverage to employees
- Strong support for people with disabilities in APHA programming
 - Annual meeting
 - Access to educational materials
- Active Disabilities Section
 - Subject matter experts on public health and disabilities
 - Supports APHA advocacy agenda on disabilities

APHA Annual Meeting State-of-the-Art Programming

- Use of accessible facilities
 - Hotels and convention center
- Web page dedicated to accessibility resources, and services
- Sign language interpreters, housing, and transportation
- ADA training for hotel staff and vendors
- Accessibility Desk in convention center
- Dedicated accessibility Web page



APHA Annual Meeting State of the Art Programming

- Accessibility Guide to convention city
- On-call accessible shuttle van and regular shuttle buses with lifts
- Reimbursement for taxi service for registrants with mobility issues
- Assistive listening devices
- Accessibility surveys of all hotel properties
- Scientific programming on the public health aspects of disability issues





Educational Content Delivery

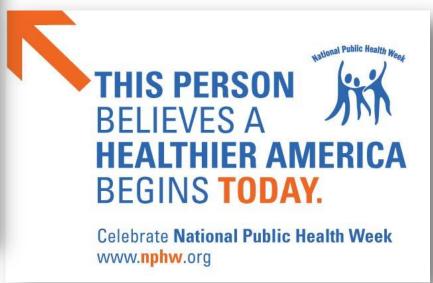
- Online educational tools
 - Webinars
 - Podcasts
- Closed captioning of videos and support-assistive technology
- Engaging the public with disabilities through public messaging
 - National Public Health Week



National Public Health Week 2012



A healthier America begins with mental and emotional well-being





Advocacy Efforts

Transportation and health

Led the health effort for reauthorization of the federal transportation bill

Reduction disabling conditions

Policy on addressing musculoskeletal conditions

Injury reduction

Occupational safety

Access to health care for all

- Supported the Affordable Care Act
- Fought for mental health parity



APHA Is Looking To Strengthen Its Capacity To Address Disabilities

- Need to "walk the talk"
- APHA can and needs to do more
- Not a one-time fix
- Must change its way of thinking as an association so that ensuring accessibility is engrained in all that APHA does

APHA Vision of APHA's Future

- Move from being a model employer to..... becoming the model employer
- Move from being an industry leader to..... becoming the association to emulate for health, disability, and accessibility issues



The APHA Approach to Ensuring Accessibility in Its Work

- Do an accessibility evaluation of programs and business practices
- Do a periodic review of Web and communication tools
- Use APHA's accessibility team as advisers to help us improve our performance in ensuring accessibility



The APHA Approach to Ensuring Accessibility In Its Work

- ☐ Train staff in diversity and health inequities
- Develop a written plan based, in part, on a comprehensive external review
 - Programs, facilities and work practices
- Implement the plan and track progress

Milestones and timelines based on external review and association priorities

- Ensure success
 - Resolve workplace issues
 - Achieve a culturally competent staff and membership on accessibility issues

Failure Is Not an Option

- ☐ This will not be easy
- Price of failure is high
 - Inadequate access to knowledge for APHA members and the profession
 - Higher cost of health care for preventable disabilities APHA could have influenced
 - Poorer quality of health care and health outcomes for the public
 - Lower quality of life for the public and APHA employees

